

List of Claims:

1. (Currently Amended) A method for providing a user an interface to a voice application, the method comprising:

providing a user with a voice activated interface to access the application and to invoke any of a plurality of application services;

receiving a voice communication from the user;

selecting an application service from the plurality of services for the user, without the user requesting said application service, as a function of information representative of the user's past access to the application; and

providing the selected application service to the user.

2. (Original) A method according to claim 1, wherein the information representative of the user's past access to the application includes an identifier associated with a service provided by the application.

3. (Original) A method according to claim 1, wherein the information representative of the user's past access to the application includes a time that the user requested the service.

4. (Original) A method according to claim 1, wherein the information representative of the user's past access to the application includes a date that the user requested the service.

5. (Original) A method according to claim 1, wherein the information representative of the user's past access to the application includes a location from which the user requested the service.

6. (Previously Presented) A method according to claim 1, wherein selecting an application service for the user comprises:

determining, for a predetermined number of time periods, a number of times the user selected a particular application service during the predetermined number of time periods; and

selecting the particular application service if the number of times the user selected the particular application service during the predetermined number of time periods is equal to or above a predetermined threshold.

7. (Previously Presented) A method according to claim 6, wherein selecting the particular application service comprises selecting the particular application service if a ratio of the number of times the user selected the particular application service during the predetermined number of time periods to the number of times the user could have selected the particular application service during the predetermined number of time periods is equal to or above a predetermined threshold.
8. (Previously Presented) A method according to claim 6, further comprising, for each time period, counting more than one occurrence that the user selected the particular application service as only one occurrence.
9. (Previously Presented) A method according to claim 6, wherein the selected application service is the application service that the user accessed most frequently during the predetermined number of time periods.
10. (Previously Presented) A method according to claim 6, wherein each day includes more than one of the time periods.
11. (Previously Presented) A method according to claim 6, wherein the time periods include a weekday time period and a weekend time period.
12. (Previously Presented) A method according to claim 11, wherein each weekday includes more than one of the weekday time periods and each weekend day includes more than one of the weekend time periods.
13. (Previously Presented) A method according to claim 6, further comprising:

ranking each of the time periods by priority such that if a user selected the particular application service at a time within two different time periods and one of the two time periods has a higher priority, a pattern for the one of the two time periods having the greater priority is considered first.

14. (Previously Presented) A method according to claim 1, further comprising:
allowing the user to modify the information representative of the user's past access to the application.

15. (Previously Presented) A method according to claim 6, further comprising:
performing speech recognition on input from the user;
determining an accuracy of the speech recognition;
wherein providing the application service to the user comprises providing the application service to the user if the number of times the user selected the application service during the predetermined number of time periods is equal to or above a first predetermined threshold and if the accuracy of the speech recognition is within a predetermined accuracy range.

16. (Currently Amended) An apparatus for providing a user an interface to a voice application, the apparatus comprising:
a server having a processor and associated memory, wherein the server includes:
means for providing a user with a voice activated interface to access the application and to invoke any of a plurality of application services;
means for receiving a voice communication from the user;
means for selecting an application service for the user, without the user requesting the application service, as a function of information representative of the user's past access to the application; and
means for providing the selected application service to the user.

17. (Original) An apparatus according to claim 16, wherein the information representative of the user's past access to the application includes an identifier associated with a service provided by the application.

18. (Original) An apparatus according to claim 16, wherein the information representative of the user's past access to the application includes a time that the user requested the service.

19. (Original) An apparatus according to claim 16, wherein the information representative of the user's past access to the application includes a date that the user requested the service.

20. (Original) An apparatus according to claim 16, wherein the information representative of the user's past access to the application includes a location where the user requested the service.

21. (Currently Amended) An apparatus according to claim 16, wherein the means for selecting the application service for the user comprises:

means for determining, for a predetermined number of time periods, a number of times the user selected a particular application service during the predetermined number of time periods; and

means for selecting the particular application service if the number of times the user selected the particular application service during the predetermined number of time periods is equal to or above a predetermined threshold.

22. (Previously Presented) An apparatus according to claim 21, wherein the means for selecting a particular application service for the user comprises means for selecting the particular application service if a ratio of the number of times the user selected the particular application service during the predetermined number of time periods to the number of times the user could have selected the particular application service during the predetermined number of time periods is equal to or above a predetermined threshold.

23. (Previously Presented) An apparatus according to claim 21, wherein the server further includes, for each time period, means for counting more than one occurrence that the user selected the particular application service as only one occurrence.

24. (Previously Presented) An apparatus according to claim 21, wherein each day includes more than one of the time periods.

25. (Previously Presented) An apparatus according to claim 21, wherein the time periods include a weekday time period and a weekend time period.

26. (Previously Presented) An apparatus according to claim 25, wherein each weekday includes more than one of the weekday time periods and each weekend day includes more than one of the weekend time periods.

27. (Previously Presented) An apparatus according to claim 24, wherein the server further includes:

means for determining a plurality of patterns of access to the particular application service based upon the time periods the user selected the particular application service; and

means for ranking each of the patterns by priority such that if a user called at a time and a plurality of patterns correspond to the time, one of the plurality of patterns having a greatest priority is considered first.

28. (Previously Presented) An apparatus according to claim 16, wherein the server further includes:

means for allowing the user to modify the information about the input of the user.

29. (Currently Amended) A method for providing a user an interface to a voice application, the method comprising:

providing a user with a voice activated interface to access the application and to invoke any of a plurality of application services;

receiving a voice communication from the user;

obtaining and storing information about one or more application services invoked by the user;

analyzing the information about the one or more application services invoked by the user to determine a pattern of usage of available application services;

selecting for the user an application service based upon the pattern of usage; and
providing the selected application service to the user.

30. (Previously Presented) A method according to claim 29, wherein selecting for the user a particular application service based upon the pattern of usage comprises selecting a particular application service if a frequency with which the user invoked the particular application service is above a predetermined threshold.

31. (Previously Presented) A method according to claim 30, wherein the frequency is determined by dividing a number of times that the user invoked the particular application service during a predetermined number of time periods by the predetermined number of time periods.

32. (Original) A method according to claim 31, wherein the time period is within a day.

33. (Previously Presented) A method according to claim 29, wherein selecting for the user an application service based upon the pattern of usage comprises selecting a particular application service if a frequency with which the user invoked the particular application service is more than a first predetermined threshold and a determined accuracy of a speech recognition of the user is within a predetermined accuracy range.

34. (Previously Presented) A method according to claim 29, wherein selecting for the user an application service based upon the pattern of usage comprises selecting a particular application if a frequency the user invoked the particular application service is less than a first predetermined threshold and a frequency one or more other users invoked the particular application service is above a second predetermined threshold.

35. (Previously Presented) A method according to claim 29, wherein selecting for the user an application service based upon the pattern of usage comprises selecting a particular application if a frequency the user invoked the particular application service at a predetermined location cluster is above a predetermined threshold.

36. (Currently Amended) An apparatus for using historical data of a user in a voice application, the apparatus comprising:

a server having a processor and memory, wherein the server includes instructions for causing the processor to:

provide a user with a voice activated interface to access the application and to invoke any of a plurality of application services;

receive a voice communication from the user;

obtain and store information about the one or more application services invoked by the user;

analyze the information about the one or more application services invoked by the user to determine a pattern of usage of the one or more of the application services;

select for the user an application service from the plurality of application services based upon the pattern of usage; and

provide the selected application service to the user.

37. (Previously Presented) An apparatus according to claim 36, wherein the instructions configured to cause the processor to select for the user an application service based upon the pattern of usage cause the processor to select a particular application if a frequency the user invoked the particular application service is above a predetermined threshold.

38. (Previously Presented) An apparatus according to claim 37, wherein the frequency is determined by dividing a number of times that the user invoked the particular application service during a predetermined time period within a day by a number of times that the user could have invoked the particular application service in the predetermined time period.

39. (Previously Presented) An apparatus according to claim 37, wherein the frequency is determined by dividing a number of times that the user invoked the particular application service during one or more occurrences of a predetermined time period by a number of the one or more occurrences of the time period.

40. (Previously Presented) An apparatus according to claim 36, wherein the instructions configured to cause the processor to select for the user an application service based upon the pattern of usage cause the processor to select a particular application if a frequency with which the user invoked the particular application service is greater than a first predetermined threshold and a determined accuracy of a speech recognition of the user is within a predetermined accuracy range.

41. (Previously Presented) An apparatus according to claim 36, wherein the instructions configured to cause the processor to select for the user an application service based upon the pattern of usage cause the processor to select a particular application if a frequency the user invoked the particular application service is less than a first predetermined threshold and a frequency one or more other users invoked the particular application service is above a second predetermined threshold.

42. (Previously Presented) An apparatus according to claim 36, wherein the instructions configured to cause the processor to select for the user an application service based upon the pattern of usage cause the processor to select a particular application if a frequency the user invoked the particular application service at a predetermined location cluster is above a predetermined threshold.

43. (Currently Amended) An article of manufacture, comprising:

a computer readable medium having computer readable program code for providing a user an interface to a voice application, the computer readable program code including instructions for:

causing a computer system to provide a user with a voice activated interface to access the application and to invoke any of a plurality of application services;

causing the computer system to receive a voice communication from the user;

causing the computer system to obtain and store information about a plurality of application services invoked by the user;

causing the computer system to analyze the information about a plurality of application services invoked by the user to determine a pattern of usage of one or more available application services;

causing the computer system to select for the user a particular application service of the plurality of application services based upon the pattern of usage; and

causing the computer system to provide the selected application service to the user.

44. (Previously Presented) An article of manufacture according to claim 43, wherein the instructions for causing the computer system to select for the user a particular application service based upon the pattern of usage comprises instructions for causing the computer system to select the particular application if a frequency the user invoked the particular application service is above a predetermined threshold.

45. (Previously Presented) An article of manufacture according to claim 43, wherein the frequency is determined by dividing a number of times that the user invoked the particular application service during a predetermined time period over one or more days by a number of the one or more days.

46. (Previously Presented) An article of manufacture according to claim 43, wherein the frequency is determined by dividing a number of times that the user invoked the particular application service during one or more occurrences of a predetermined time period by a number of the one or more occurrences of the predetermined time period.

47. (Previously Presented) An article of manufacture according to claim 43, wherein the instructions for causing the computer system to select for the user a particular application service based upon the pattern of usage comprise instructions for causing the computer system to select the particular application if a frequency with which the user invoked the particular application service is greater than a first predetermined threshold and a determined accuracy of a speech recognition of the user is within a predetermined accuracy range.

48. (Previously Presented) An article of manufacture according to claim 43, wherein the instructions for causing the computer system to select for the user a particular application service based upon the pattern of usage comprises instructions for causing the computer system to select the particular application if a frequency the user invoked the particular application service is less than a first predetermined threshold and a frequency one or more other users invoked the particular application service is above a second predetermined threshold.

49. (Previously Presented) An article of manufacture according to claim 43, wherein the instructions for causing the computer system to select for the user a particular application service based upon the pattern of usage comprises instructions for causing the computer system to select the particular application if a frequency the user invoked the particular application service at a predetermined location cluster is above a predetermined threshold.

50. (Currently Amended) A method for providing a user an interface to a voice application, the method comprising:

providing a user with a voice activated interface to access the application and to invoke any of a plurality of application services;

receiving a voice communication from the user;

selecting an application service for the user, without the user requesting said application service, as a function of information representative of other users' past access to the application; and

providing the selected application service to the user.

51. (Original) A method according to claim 50, wherein the information representative of the other users' past access to the application includes an identifier associated with a service provided by the application .

52. (Original) A method according to claim 50, wherein the information representative of the user's past access to the application includes a time that the user requested the service.

53. (Original) A method according to claim 50, wherein the information representative of the other users' past access to the application includes a date that the other users requested the service.

54. (Previously Presented) A method according to claim 50, wherein selecting an application service for the user comprises:

determining, for a predetermined number of time periods, a number of times the other users selected a particular application service during the predetermined number of the time periods; and

selecting the particular application service if the number of times the other users selected the particular application service during the predetermined number of time periods is equal to or above a predetermined threshold.